



NOTICE FOR DOE ARMORERS, SHOOTERS AND RANGE PERSONNEL OPERATING H&K P7 PISTOLS

Prepared by: Dave Ewer, Hanford Patrol Armorer

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A Hanford Patrol Lesson for Armorers, Range Officers, and SPOs Operating the H&K P7 Pistols.

This is a detailed diagnosis of two recent H&K model P7 weapons failures involving firing pin problems. Each incident was initiated by abnormal rearward protrusion of the firing pin (Attachments 1 and 2, Item #14). Both incidents were first recognized when the shooter noted the firing pin had appeared to be protruding further rearward from the back of the slide than normal.

In the first case, an SPO3 member was firing his P7 when a range officer noticed the firing pin protruding from the rear of the slide nearly twice as far as normal (Attachment 3, Diagram #3). Not understanding why this condition existed, the range officer gave a cease-fire command and had the SPO3 remove the pistol magazine and attempt to clear the weapon. Although the squeeze cocker (Attachment 1, Items #38 and #39) was released, the firing pin remained rearward. When the shooter attempted to move the slide (Attachments 1 and 2, Item #1) rearward to extract the round, the weapon discharged safely downrange. The discharge was due to two broken springs. Both the firing pin spring (Attachments 1 and 2, Item #13) and drop catch safety spring (Attachments 1 and 2, Item #4) had failed. The firing pin spring had separated into two pieces. Three coils had become deeply engaged with the remaining larger portion of the spring causing the firing pin to bind and stick in the rearward position even though still under compression. The recoil from the previous round caused the firing pin to protrude double the normal distance (Attachment 3, Diagrams #2 and #3) out of the back of the slide due in part to the increased operating space brought about by the shortened broken spring. The broken and compressed spring pieces retained enough force to ignite a primer. The Drop Catch Safety Spring also had one of its two arms (Attachments 1 and 2, Item #4) broken and gravity allowed the Catch (Attachments 1 and 2, Item #3) to fall below the path of the firing pin. When the SPO3 grasped the slide to extract the chambered round, the stuck firing pin was dislodged and struck the cartridge primer causing the weapon to discharge safely down range. These two broken springs combined to make this discharge possible. The SPO3 and range officer controlled the weapon and no injuries resulted.

The second case also concerns an abnormally protruding firing pin. The condition of this P7 looked exactly like the first case. Armed with the knowledge of the previous incident, the SPO3 removed the magazine; kept the muzzle controlled and attempted to fire. Manipulating the squeeze cocker and pulling the trigger numerous times did not cause the pistol to discharge. The Patrol Armorer determined that the firing pin was floating in and out of the back of the firing pin bushing (Attachments 1 and 2, Item #15) on the rear of the slide. In this condition, without spring pressure, it was reasoned no discharge would be possible and the SPO3 was instructed to extract the chambered round. The diagnosis was correct; no discharge occurred. The

mechanical problem associated with this incident turned out to be a sheared Firing Pin Collar-Retaining Pin (Attachments 1 and 2, Item #11) on the front of the firing pin assembly. With this small pin sheared off, there is no base against which the firing pin spring can push to build compression for the firing pin.

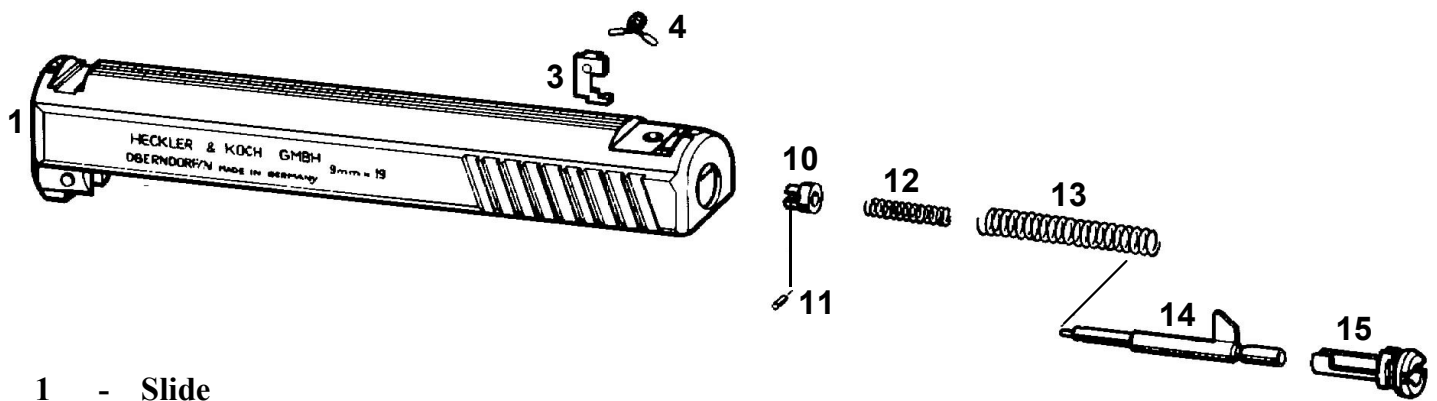
These two incidents with the P7 have one common element with two very different underlying problems and outcomes. The abnormal protrusion of the firing pin is the common element but the conditions are very different. In the first case, the weapon may fire at any moment as the firing pin is under compression and can fly forward at any moment and fire a cartridge. In the second case, the weapon may not be fired at all as there is no spring compression behind the firing pin. Armorers, Range Officers and any SPOs handling this pistol should be aware of these facts as outlined above. The first case is a very dangerous condition. The second not at all. In every case of an abnormally protruding firing pin, the weapon should have its magazine removed and the operator should attempt to fire the pistol by manipulating the squeeze cocker and pulling the trigger. The reason for this action is to deliberately fire the pistol. A failed Drop Catch Safety combined with a stuck firing pin could combine and fire the pistol. Under these circumstances, the action of manipulating the squeeze cocker alone may be enough to discharge the weapon.

A P7 pistol with a functioning Drop Catch Safety would block the firing pin as one of its normal mechanical safety functions. Unfortunately, there is no way to determine whether the Drop Catch Safety is functional during such an event without removing the slide and inspecting it. In the case of no firing pin spring pressure, the chambered round may be extracted safely regardless of the condition of the Drop Catch Safety as there is no force stored to drive the firing pin and ignite a chambered round. To differentiate between these two conditions, simply elevate and lower the muzzle and observe the firing pin. If it floats in and out under the influence of gravity, you have a weapon that is safe to unload. If it does not move and the firing pin remains protruding abnormally to the rear, you should remove the magazine and attempt to fire the weapon and continue to manipulate the weapon until it discharges safely down range.

Hanford Patrol has replaced all firing pin springs and Drop Catch Safety springs as part of our preventive maintenance program. Our P7s have already fired an average of over 15,000 rounds each. Despite these two recent breakages, these pistols have delivered excellent service and reliability as well as superb accuracy.

The best possible course of action in these situations on a Firing Range is for the shooter to recognize the abnormal firing pin position and to call a cease-fire, then conduct all further actions under supervision and/or control of the Range Officer, Line Officer, Armorer or other qualified supervisory personnel. These conditions were recognized and acted upon by experienced and trained personnel. Based on experiences described here, others may also be able to recognize these conditions and take actions to preclude any unfortunate accidents. Please disseminate this information accordingly. Feel free to contact Dave Ewer, Hanford Patrol Armorer, on (509) 376-7248 if you have questions or other related experiences.





- 1 - Slide
- 3 - Drop Safety Catch
- 4 - Drop Safety Catch Spring
- 10 - Firing Pin Collar
- 11 - Firing Pin Collar Pin
- 12 - Inertia Spring
- 13 - Firing Pin Spring
- 14 - Firing Pin
- 15 - Firing Pin Bushing



Diagram #1



Diagram #2

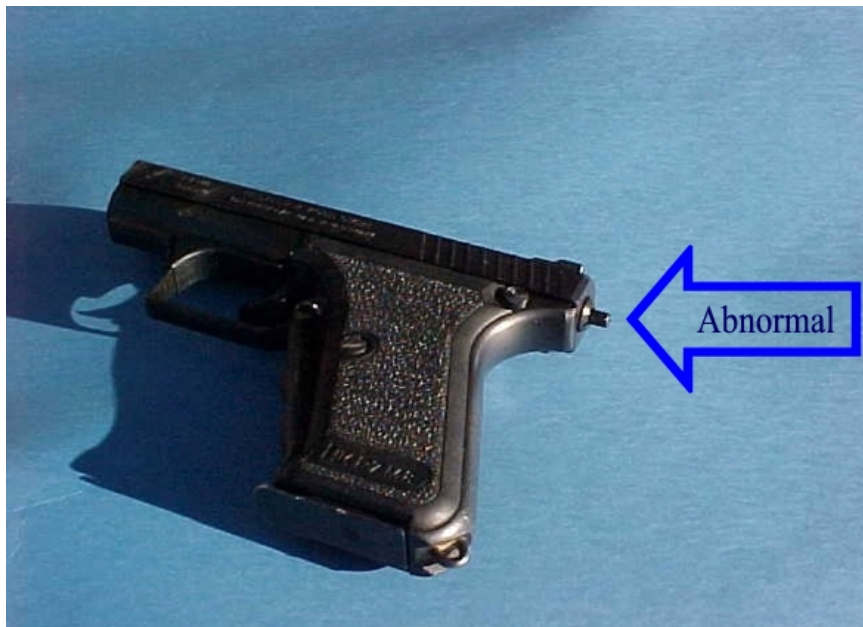


Diagram #3

The key is for the operator to recognize the abnormal condition of the firing pin during operations.